

IN THE CLAIMS

This listing of claims will replace all prior version, and listings, of claims in the application:

1. (Currently Amended) A method of generating a network zone plan, comprising:

~~collecting device~~ collecting connectivity information using a plurality of software agents in every principal switch and host for devices in a storage network;

~~performing an analysis on the collected information to infer relationships between the devices;~~

reporting by the software agents the configuration data to a configuration database;

reporting by the software agents the storage configuration of the host to a ~~identifying policies to be utilized in generating a zone plan of the network, wherein said policies include granularity, type of storage device, and grouping;~~ storage subsystem; and

performing an analysis on the collected information to infer relationships between the devices;

~~generating the zone plan based on a combination of the analysis performed and the identified zoning policies; and~~

~~implementing said zone plan in a SAN~~

whereby the zone plan generator adds storage devices to existing zones or allocates a new zone plan based on user generated zone policies.

2. (Canceled)

3. (Currently Amended) The method of claim 1 wherein the zone plan dictates visibility of devices in the zone instead restricting within or between the zones ~~which of the devices are~~

visible to each other.

4. (Currently Amended) The method of claim 3 wherein size of the zone is an attribute specified by the system administrator ~~devices include host systems to access data and storage subsystems which are providers of data.~~

5. (Currently Amended) The method of claim 4 ~~wherein the zone plan is a network-layer access control mechanism which dictates which storage subsystems are visible to which hosts~~ 3 wherein the storage relationship and network path connectivity between host and storage subsystem are done by correlating the information and by appropriate topological search.

6. (Canceled)

7. (Currently Amended) A computer program product having instruction codes for providing autonomic zoning in a storage area network, comprising:

a first set of instruction codes for collecting device connectivity information for devices in a network;

a second set of instruction codes for performing an analysis on the collected information to infer relationships between the devices;

a third set of instruction codes for identifying policies to be utilized in generating a zone plan of the network; and

a fourth set of instruction codes for generating the zone plan based on a combination of the analysis performed and the identified administrator defined zoning policies.

8. (Canceled)

9. (Currently Amended) The computer program product of claim 7 wherein the data is collected from all devices in the SAN periodically or when a physical change in the configuration occurs, zone plan dictates which of the devices are visible to each other.

10. (Currently Amended) The computer program product of claim 9 wherein the port-to-port connectivity's of the storage area network is inferred from the graph structure obtained as a result of the analysis devices include host systems to access data and storage subsystems which are providers of data.

11. (Currently Amended) The computer program product of claim 10 wherein the granularity, device, size and type are the attributes used to generate zone policy, the zone plan is a network-layer access control mechanism which dictates which storage subsystems are visible to which hosts.

12. (Canceled)

13. (Canceled)